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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,416	09/16/2003	Bruce B. Randolph	CP34019	2714
23490	7590	12/07/2009		
HONEYWELL/UOP PATENT SERVICES 101 COLUMBIA DRIVE P O BOX 2245 MAIL STOP AB/2B MORRISTOWN, NJ 07962			EXAMINER MCDONOUGH, JAMES E	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 12/07/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IP.Docketclerk@uop.com

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Office Action Summary

Application No.

10/663,416

Applicant(s)

RANDOLPH ET AL.

Examiner

JAMES E. MCDONOUGH

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-35, 37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) 10-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 30-35, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 9, 30-35, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Bahar et al. (US 2001/0024755).

Regarding claims 1, 4, 8, 9, 30, 33 and 37-38

Bahar teaches polymer compositions that can consist of polymer and a compound that is a perhaloalkylsulfonic acid (ion exchange resin) (paragraphs 0015-0025 and 0067-0071), and since the reference teaches that the polymer contains the ion exchange resin it would be expected to be able to hold it in place.

With regards to the claim limitation of “wherein said composition is in a reactor”, it is noted that even the title of the reference “Solid Electrolyte Composite for Electrochemical REACTION APPARATUS”, here given its broadest reasonable interpretation a “REACTION APPARATUS” would be a reactor, as it is a container holding agents that are reacting. Further it is noted that this limitation is not seen to limit the composition itself.

With regards to the limitation of the composition being pourable it is noted that 1.) This is not seen to limit the composition in any way as anything is pourable at some scale 2.) The reference teaches that the pores of the membrane are filled with a

polymer electrolyte/ion exchange resin (paragraph 0018-00025), and the reference defines the ion exchange resin (paragraphs 00567-0071), and one skilled in the art would expect that these composition would be pourable since they must be deposited within the pores of a membrane, absent any evidence to the contrary.

Bahar teaches that the polymer porosity should be between 40 and 95 %, preferably 70 % (paragraph 042), and since the pores are filled with the acid component, this would read on the claims amount of acid component, absent any evidence to the contrary, as the skilled artisan would expect that a composition filling 40-95 %, preferably 70 % of a volume would read on at least 5 wt %, as the densities would not be expected to differ so greatly as to read on less than 5 wt %.

Regarding claims 2, 3, 31, and 32

Bahar teaches that the polymer can be polyacrylic acid (paragraph 0059).

Regarding claims 5, 6, 34, and 35

These claims only limit the composition when the acid component is selected from groups 4 or 5 from claims 1 or 30.

Response to Arguments

Applicants argue against the 102 rejection over Bahar.

Applicants argue that Bahar does not explicitly disclose a composition where the acid component is present in a range from about 5 to about 90 wt. %. This is not persuasive and while it may be true that the reference does not explicitly disclose this range, the reference does teach that the acid is filling the pores of a porous matrix, that

is between 40-95 % porous, preferably 70 %, which leaves 5-60 % of the acid, preferably 30 %, and while this is not a weight percent, the densities would not be expected to be so different to make the upper amount of the reference outside of the range of the instant invention, or the preferred amount for that matter.

Applicants argue that no reason has been provided as to why the disclosure of Bahar would implicitly/inherently, that is necessarily, disclose such an acid component. This is not persuasive for the reasons given above, and in that of the rejection.

Applicants remaining arguments have been fully considered, but are not persuasive for the same reasons given above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES E. MCDONOUGH whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793

/James E McDonough/
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